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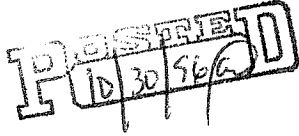
**KIAWAH ISLAND UTILITY, INC.**

**DOCKET NO. 96-168-W/S**

**BEFORE THE SOUTH CAROLINA PUBLIC  
SERVICE COMMISSION**

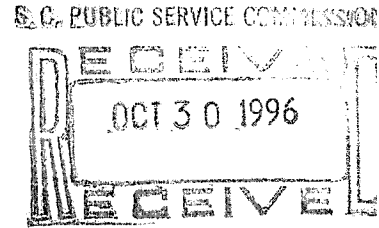
**HEARING DATE: DECEMBER 2, 1996**

1. PRE-FILED TESTIMONY OF TOWNSEND P. CLARKSON
2. PRE-FILED TESTIMONY OF JAMES MITCHELL BOHANNON, III



KIAWAH ISLAND UTILITY, INC.

DOCKET NO. 96-168-W/S



PRE-FILED TESTIMONY OF TOWNSEND P. CLARKSON  
BEFORE THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

Testimony Prepared: October 29, 1996

Hearing Date: December 2, 1996

THIS TESTIMONY IS FILED PURSUANT TO PSC ORDER DATED OCTOBER 17, 1996. THE APPLICANT RESERVES THE RIGHT TO PROVIDE REBUTTAL TESTIMONY TO THE TESTIMONY TO BE PRE-FILED, PURSUANT TO SAID ORDER, BY THE COMMISSION STAFF AND INTERVENORS.

BY MR. PADGETT: Mr. Clarkson, would you please state your full name, business address and occupation?

BY MR. CLARKSON: My name is Townsend P. Clarkson, and my business address is 7 Beachwalker Drive, Kiawah Island, South Carolina, 29455. I am the Chief Operating Officer of Kiawah Resort Associates, L.P., a Delaware Limited Partnership, and the owner of all of the outstanding shares of stock in Kiawah Island Utility, Inc., the Applicant herein. I am also the Treasurer of the Applicant, Kiawah Island Utility, Inc., whose service area is Kiawah Island, South Carolina.

BY MR. PADGETT: Mr. Clarkson, would you please explain the operation of the Utility Company and the basis for the Utility Company's application for an increase in water and sewer rates?

### Purchase of Kiawah Island and Kiawah Island Utility Company

On June 28, 1988, Kiawah Resort Associates, primarily comprising a group of Charleston businessmen, headed by Charles S. Way, Jr., Chairman of the Board of Kiawah Resort Associates, purchased the Kiawah Island Resort, including all of the stock in Kiawah Island Utility, Inc., from Kiawah Island Company, Ltd. This sale was the largest real estate transaction in the history of South Carolina, with the purchase price being approximately \$105 million. None of the principals of Kiawah Island Company, Ltd. were hired by the new owners. Because the sale was a sale of assets, none of the financial records of the prior owners were turned over to the new owners. The financial records and accounting functions of the Utility Company were under the direction of the parent company, Kiawah Island Company, Ltd. Fortunately, the Utility Company management and employees remained with the Utility Company.

On June 25th, 1992 KRA sold its assets inclusive of the stock in Kiawah Island Utilities, Inc. to a new limited partnership, Kiawah Resort Associates, L.P. This new group comprises most of the original Charleston businessmen with the addition of a new investment partner, Morgan Stanley Real Estate Fund, L.P.

### Administration

The following persons have been elected as officers of the Utility Company:

|                       |                |
|-----------------------|----------------|
| Charles P. Darby, III | President      |
| Leonard L. Long, Jr.  | Vice-President |
| Betty R. Crow         | Secretary      |
| Townsend P. Clarkson  | Treasurer      |

The sole Director of the Utility Company is Charles S. Way, Jr., Chairman of the Board. Becky Dennis is the Manager of the Utility Company.

The Utility Company's office is located at 31 Sora Rail Road, on Kiawah Island. There are currently fourteen (14) salaried employees of the Utility Company with one position to be filled. They are:

|                   |                    |
|-------------------|--------------------|
| (1) Becky Dennis  | Manager            |
| (2) Keith Weeks   | Assistant Manager  |
| (3) Marie Roper   | Receptionist       |
| (4) Joe Beck      | Controller         |
| (5) Perry Carrol  | Assistant Operator |
| (6) Thomas Cox    | Night Watch        |
| (7) Veronica Dyke | Lab Director       |
| (8) Bobby Grooms  | Assistant Operator |
| (9) Paul Hawkes   | Night Watch        |
| (10) Ed McCray    | Assistant Operator |

|                     |                  |
|---------------------|------------------|
| (11) Thomas Owens   | A/R Clerk        |
| (12) Randy Roberts  | Field Supervisor |
| (13) Donald Sondles | Operator Trainee |
| (14) Justin Higgins | Trainee          |
| (15) To be filled   | Trainee          |

### Water Supply

During the year ending December 31, 1995, the Utility Company served an average of 2,396 residential water customers and 68 commercial water customers. The Utility Company services its water customers through approximately 50 miles of water pipelines. The Utility Company receives all of its water from the St. John's Water Company, which, in turn, receives its water supply from the Commissioners of Public Works of the City of Charleston. The average daily flow in the test year 1995 was 1,635 million gallons. The peak day demand was 3.887 million gallons, which occurred on July 22, 1995.

The water system is operated under South Carolina DHEC Permit No. 1010008.

St. John's Water Company supplies water to Kiawah through a 16" water line which transports water to Kiawah's 16" water line at the intersection of Bohicket Road and Kiawah Island Parkway. A new 24" water line has been laid from River Road to Haulover Creek and has been connected to the Company's 16" water line at the intersection of Kiawah Island Parkway and Bohicket Road. From this intersection, the water line runs approximately 3.3 miles along the Kiawah Island Parkway to the

Kiawah Island Utility Company water plant, for distribution to its customers. The water plant facility is comprised of: three (3) ground level storage tanks with a capacity of 4.5 million gallons, along with support equipment for the pumping and metering of the water supply and distribution system.

### Wastewater

During the test year ending December 31, 1995, the Utility Company served an average of 2,306 residential and 45 commercial sewer customers. The Utility Company's sewer system is comprised of gravity collection mains, force mains, and treated effluent transfer mains, aggregating approximately 58 miles, 37 sewage pumping stations, and a wastewater treatment facility. The wastewater treatment facility is located at 31 Sora Rail Road. During the test year (1995), the average daily flow was four hundred thirty-two thousand gallons (0.432 MGD) with a maximum flow day of nine hundred fifteen thousand gallons (0.915 MGD), which occurred on August 24, 1995.

The Utility Company's wastewater facility's capacity is rated at 1.1 million gallons per day and operates under S.C. DHEC Permit #ND0017361. There have been no quality parameter violations.

### 1992 PSC Order No. 92-1030, Issued December 15, 1992

The rates and charges that are currently in effect for the Utility Company were approved by the Commission on December 15, 1992, by Order No. 92-1030 in Docket No. 92-192-W/S. In its Order, the Commission concluded as follows:

12. ... the Company should have the opportunity to earn a 8.50% operating margin.  
(p.36 of Order)

Kiawah Island Utility, Inc. has undertaken a major capital improvement program since Kiawah Resort Associates, LP purchased the utility in 1988. The needs of the Utility are regularly being reviewed and improvements implemented. Since the last rate increase in 1992 the Company has undertaken several significant capital improvement projects to enhance the water and wastewater systems on Kiawah. These improvements include, but are not limited to, the costs associated with the telemetry of major irrigation systems, improvements to the water pumping/storage and wastewater treatment/storage facility, improvements to the St. Johns Water transmission system and storage facility, cost associated with installing sewer on Eugenia Avenue, plus the purchase of transmission lines from KRA. Since the last rate increase, granted December 15, 1992, the Company has increased its commitment from NationsBank from Five Million Three Hundred Twenty-Five Thousand (\$5,325,000) Dollars to Seven Million Six Hundred Ninety-Nine (\$7,699,000) Dollars to pay for the capital improvements. This currently requires an interest payment to NationsBank of South Carolina of approximately \$540,000 per annum, with a principal and interest payment of approximately \$630,000 annually.

The increase in plant and equipment has significantly altered the Company's financial position. The Company must earn sufficient revenues to pay for the capital improvements that have been constructed since 1992 or are in the process of being constructed. The Company's proposed rate increase should allow the Company to

earn sufficient revenues to have a positive Operating Margin of approximately 5.43%, which the Company believes to be a minimal Operating Margin for the Company. It should be noted at this point that an operating margin of 5.43% is substantially less than the 8.5% authorized by the Commission in 1992.

Since the last rate increase received by the Company on December 15, 1992, the Company has incurred increased costs associated with purchased water from St. John's Water Company. The cost of water purchased from St. John's Water Company increased from \$1.34/thousand gallons to the current rate of \$1.46/thousand gallons, an increase of 9%. The total cost of water, inclusive of Operation and Maintenance and leakage, has risen from \$1.37/thousand gallons to \$1.63/thousand gallons, which represents a 19% increase.

The rates proposed by the Company means that the average residential customer, who uses approximately 11,000 gallons of water per month, will have an increase in his utility bill from \$54.40 per month to \$65.90, which is an increase of 21.14%. The minimum usage (2,000 gallons or less) customer's bill will increase from \$40.00 per month to \$47.00 per month, or 17.5%.

#### Pro-Forma Adjustments to Income Statement

I would now like to address how the cost of the capital improvement program, and other adjustments to the 1995 actual expenses, financially impact the Utility Company. I would like to introduce as HEARING EXHIBIT #1, the Utility Company's pro-forma, originally filed as Exhibit "D" to the Application. Since the filing of the Application, certain contract amounts have become firm, and I will explain



those changes as I go through the Exhibit. However, the amount of the changes is minimal and does not materially affect the Company's financial position. I will now review each of the adjustments in the order listed in Hearing Exhibit 1.

## Revenues

### Adjustment #1 - Operating Revenues

Operating revenues were decreased by \$165,628. Two adjustments were made regarding our operating revenues for the test year ending December 31, 1995. First, pursuant to Public Service Commission policy, we moved \$122,500 in Tap in revenue to Contributions in Aid of Construction for rate-making purposes. While tap fees are income to the Utility Company, we recognize that for rate-making purposes, it is treated as Contributions in Aid of Construction. Second, \$43,128 of Interest & Miscellaneous Income was eliminated from our revenue. These types of income, historically, have not been included in the rate-making process.

## Expenses

### Adjustment #2 - Operating & Maintenance

We adjusted Operating and Maintenance expenses in three areas that caused a total decrease in this category by \$57,065.

The deductions from Operation and Maintenance expenses include certain types of employee benefits that have not been allowed in the rate making process. These include Christmas gifts given to employees. Accordingly we reduced our expenses by \$1,875.

To conform with our adjustment of moving our Tap In revenue to Contributions

In Aid of Construction we also had to move \$19,226 in meters, materials and supplies associated with these revenues from an expense item to a capital item in Gross Plant.

Additionally, our three year average cost for professional fees for outside engineering services amounted to \$54,454. We decreased our professional fee's expenses by \$46,790 to equate our three year average. This gives the effect in our Pro-Forma of normalizing these expenses. Also, we increased professional fees costs associated with the rate case by \$10,826. This amount was used by the PSC staff in the previous rate case.

#### Adjustment #3 - Depreciation & Amortization

Depreciation and Amortization was decreased by \$32,323. This amount includes the Contributions In Aid of Construction associated with availability fees which were eliminated in 1990. The \$33,284 reduction is a carry forward in compliance with the Public Service Commission's rate order to Kiawah Island Utility, Inc. (Order No. 85-834, page 13-17).

Also, Depreciation was adjusted upward by the addition of \$961 because of the capitalization of meters, materials and supplies associated with Tap-In Revenue, as explained in Adjustment #2 above.

#### Adjustment #4 - Other

At the time of filing the Application, we increased the Other expense category by \$50,000. This amount approximates a three year average cost to remove sludge from holding cell #3.

Initially, KIU estimated the cost for sludge removal to be \$50,000. Since the

application was filed, KIU has received three bids for removal of 1,000,000 gallons of sludge from cell #3. These costs range from \$575/dry ton to \$759.75 per dry ton. The Utility contracted with Fenn-Vac, the low bidder at \$575/dry ton. Based upon the low bid, the cost of removing 1,000,000 gallons using 4.3% solids is \$97,612 which is an increase from the original estimate of \$50,000.00. (Dry tonnage is determined by sampling and testing performed by an outside lab.)

The sludge must come out for the following reasons:

- a. The level reaches the top of the cell (8' + deep) in some place.  
This restricts the ability to treat the wastewater efficiently.
- b. A floating barrier needs to be installed in this cell to enhance the treatment capabilities by restricting the sludge to one portion of the lagoon. It will make it easier to remove the sludge for composting with the existing dredge pump.

#### RATE BASE - PLANT IN SERVICE

The largest adjustment centers around the capital improvement project we have undertaken in the last couple of years. Some of the projects have been completed and a couple of projects are still under construction or contract. The cost of these projects in 1996, completed or to be completed, is \$2,746,884 based upon current information.

#### Adjustment #5 - Gross Plant

|                       |      |              |
|-----------------------|------|--------------|
| (1) Telemetry Project | 1995 | \$ 16,435    |
|                       | 1996 | <u>6,365</u> |
|                       |      | \$ 22,800    |

The telemetry project is a system designed to turn large irrigation systems off during emergency situations. This Commission issued its Order on May 31, 1995, Order #95-1174, approving the telemetry regulation. It has been completed.

|     |                             |           |               |
|-----|-----------------------------|-----------|---------------|
| (2) | Water Plant Pumping Upgrade | 1996      | \$ 70,798     |
|     |                             | 1996 Plus | <u>30,000</u> |
|     |                             |           | \$ 100,798    |

KIU has gone through a series of pump upgrades to enhance the pumping capacities by installing variable speed pumps which are more efficient in operation. The project is primarily complete. The remaining item to be completed is the instrumentation panels and controls.

|     |                |           |                |
|-----|----------------|-----------|----------------|
| (3) | Eugenia Avenue | 1994      | \$ 20,122      |
|     |                | 1995      | 10,748         |
|     |                | 1996      | 2,202          |
|     |                | 1996 Plus | <u>467,115</u> |
|     |                |           | \$ 500,187     |

This is the project that we brought before the Commission earlier this year for approval of charges to property owners on Eugenia Avenue for the extension of the sewer main. It was Docket #96-0745.

This project extends sewer service to those customers on Eugenia Avenue who do not currently have service. The \$500,000 included for the Eugenia Avenue project was included in this current rate application because KIU had to withdraw the petition for charges earlier this year prior to the Commission ruling as to whether the cost should be included in the rate base, or borne only by the affected customers on Eugenia

Avenue. The Petition was withdrawn because the contractor who was awarded the contract was no longer available to construct the project. The Commission's Order granting the Request to withdraw the Petition was Order #96-407 dated June 12, 1996. Because no decision was made by the Commission, we decided to include the cost of the proposed sewer main extension in this rate case and have the Commission decide if all of the property owners should be responsible for paying the costs of the Eugenia Avenue extension, or if the cost should be borne by only the property owners on Eugenia Avenue who will receive the service.

If the Commission rules that the extension of the sewer line on Eugenia Avenue should be paid for only by the Eugenia Avenue property owners, then the cost paid by the Eugenia Avenue property owners would be Contributions in Aid of Construction, and not be included in the rate base.

|     |                              |      |                  |
|-----|------------------------------|------|------------------|
| (4) | Down Island Storage Facility | 1995 | \$ 188,822       |
|     |                              | 1996 | <u>1,256,743</u> |
|     |                              |      | \$1,445,565      |

The Down Island Storage facility has been completed at a cost of \$1,445,565. This project consisted of the construction of a 1.0 million gallon water storage tank on Governor's Drive, and the related pump station and piping. The pump station consisted of two (2) 50 Hp pumps, a 200 Hp booster pump system, a chlorinator system instrumentation,

and controls.

|     |                         |      |               |
|-----|-------------------------|------|---------------|
| (5) | Maybank Booster Station | 1994 | \$ 2,498      |
|     |                         | 1995 | 329,308       |
|     |                         | 1996 | <u>91,441</u> |
|     |                         |      | \$423,247     |

KIU is required by contract to share in the cost of St. John's Water Companies asset additions to the transmission system based upon KIU's prorata share of gallons used compared to total gallons taken by St. John's. This project was for boosting pressure to the Transmission system of St. John's Water Company. It included the construction of a 250,000 gallon storage tank and Booster Pump Station. We paid 60% of the cost, while Seabrook Island paid 28%, and the St. John's Water Company paid the remaining 12%.

|     |  |      |           |
|-----|--|------|-----------|
| (6) | Transmission Lines and Related Water and Wastewater Facilities | 1996 | \$805,795 |
|-----|--|------|-----------|

These water and wastewater facilities include:

- (1) for water - transmission lines, valves and associated appurtenances, and fire hydrants;
- (2) for wastewater - transmission lines, pump stations, and associated appurtenances.

They were purchased from KRA on September 1, 1996 for \$805,795.

KRA is financing the purchase over a period of ten (10) years at 7.75% per year. The monthly payment is \$9,670.40.

### Summary of Capital Improvement Adjustments

Now that the contract amounts are firm, the dollar amount of contracts completed or to be completed in 1996, as known and measurable amounts, is \$2,746,884 as compared to \$2,755,303 set forth in the Schedule for Adjustment #5 - Gross Plant on page D2-2 of Exhibit D to the Rate Application. This difference of \$8,419<sub>±</sub> is minimal as it affects the Net Operating Income and the Operating Margin.

#### Adjustment #6 - Accumulated Depreciation

Accumulated Depreciation was increased in total by \$69,844. We increased accumulated depreciation by \$961 for the expenses related to capitalizing Tap In expenses. The remaining increase of \$68,883 was the approximate change in accumulated depreciation for one fiscal year when the \$2.7 million of capital improvements are booked.

#### Adjustment #7 - Contributions In Aid Of Construction

Contributions In Aid of Construction increased by \$1,635,420. The \$122,500 increase in this category resulted from Capitalizing Tap In revenue. The second adjustment for \$1,512,920 is a carry forward from requirements by the Public Service Commission (Order No. 85-834 pages 13-17) relating to availability fees. We do not collect availability fees.

#### Adjustment #8 - Rate Increase

The proposed rates will produce additional revenues of \$484,369.00 as shown on SCHEDULE 5 of Hearing Exhibit 1.

#### Adjustment #9 - Operating Taxes

This adjustment is for the tax effects of Interest synchronization

See attached Hearing Exhibit 1 - SCHEDULE 4

#### Adjustment #10 - Customer Growth

Based upon a customer growth factor of 1.8%, the Utility expects an additional revenue of \$2,998.00 as set forth on SCHEDULE 2 of Hearing Exhibit 1.

#### Interest Expense Adjustment

Another accounting adjustment that we made was for the additional interest expense of \$139,013 that the Utility incurred or will incur as a result of the addition of the \$2.7 Million in capital improvements I have already discussed. The calculation for this interest expense adjustment is found on SCHEDULE 4 of Hearing Exhibit #1.

#### Summary of Proposed Pro-Forma Adjustments

These pro-forma adjustments amount to an additional cost to the Utility Company of \$99,625. That, added to the booked expenses for 1995, gives the Utility Company "as adjusted" expenses of \$2,920,816. Without a rate increase to provide for additional revenues, the Utility Company will sustain a loss of approximately \$269,955.00 which would have the Company operating at a negative operating margin of (10.18%).

#### Rate Comparison With Other Local Utilities

Now, I would like to introduce Hearing Exhibit #2, a rate comparison chart showing how Kiawah Island Utility Company's rates compare to other utilities in the Charleston area. This rate comparison is from the Company's records and



indicates how the Company's water and sewer rates compare to other water and sewer utilities in the Charleston area.

If the Commission grants Kiawah its requested increase in rates, Kiawah's new rate will be below the rates charged by the Isle of Palms, Seabrook Island, City of Charleston (outside City), and others.

#### Conclusion

In conclusion, the Utility Company is not seeking a large profit. The Utility Company is asking that it be allowed to generate sufficient revenues to pay its bills and maintain a small operating margin. The capital improvements funded by the Utility Company since 1992 were necessary in order for the Utility Company to efficiently perform its function of providing adequate water and sewer service to its customers.

As is shown in Hearing Exhibit #1, the proposed rate schedule should generate an additional \$484,369 in revenue. Considering that the Utility Company projects a loss of \$269,955, this additional revenue should give the Utility Company a net operating income of approximately \$170,147, which gives the Company an operating margin of only 5.43%. Considering the Commission's Order in 1992 that a 8.50% operating margin was reasonable, the Utility Company believes that it is making every effort possible to operate the Utility Company on a minimal positive operating margin, by making a request for an increase in rates that will yield a projected operating margin of only 5.43%. This concludes my direct testimony.

KIAWAH ISLAND UTILITY, INC.  
OPERATING EXPERIENCE, RATE BASE, RATE OF RETURN AND OPERATING MARGIN  
TEST YEAR ENDED 12/31/95

| DESCRIPTION                             | 1995<br>INCOME | ACCOUNTING<br>PRO FORMA<br>ADJUSTMENTS(A-1) | BOOKS<br>AS<br>ADJUSTED | PROPOSED<br>INCREASE<br>ADJUSTMENTS(A-1) | EFFECT OF<br>PROPOSED<br>INCREASE |
|---|----------------|---|-------------------------|--|-----------------------------------|
| <b>OPERATING REVENUES</b>               |                |   |                         |  |                                   |
| TOTAL REVENUE                           | \$2,816,489    | (\$165,628) 1                               | \$2,650,861             | \$484,369 8                              | \$3,135,230                       |
| <b>OPERATING EXPENSES</b>               |                |   |                         |  |                                   |
| OPERATIONS & MAINTENANCE                | 1,782,743      | (57,065) 2                                  | 1,725,678               |  | 1,725,678                         |
| DEPRECIATION/AMORTIZATION               | 326,294        | (32,323) 3                                  | 293,971                 |  | 293,971                           |
| OTHER                                   | 202,519        | 50,000 4                                    | 252,519                 |  | 252,519                           |
| OPERATING TAXES                         | 121,025        |   | 121,025                 | 47,265 9                                 | 168,290                           |
| INTEREST EXPENSE                        | 388,610        | 139,013                                     | 527,623                 | 0  | 527,623                           |
|   | 2,821,191      | 99,625                                      | 2,920,816               | 47,265                                   | 2,968,081                         |
| CUSTOMER GROWTH                         |                |   |                         | 2,998 10                                 | 2,998                             |
| INCOME FOR RETURN                       | (4,702)        | (265,253)                                   | (269,955)               | 440,102                                  | 170,147                           |
| <b>RATE BASE:</b>                       |                |   |                         |  |                                   |
| PLANT IN SERVICE                        | 12,183,920     | 2,774,529 5                                 | 14,958,449              |  | 14,958,449                        |
| ACCUMULATED<br>DEPRECIATION/AMORT       | 2,652,928      | 69,844 6                                    | 2,722,772               |  | 2,722,772                         |
| NET PLANT IN SERVICE                    | 9,530,992      | 2,704,685                                   | 12,235,677              | 0  | 12,235,677                        |
| CONSTRUCTION WIP                        | 551,499        | 0   | 0                       |  | 0                                 |
| CONTRIBUTIONS IN AID OF<br>CONSTRUCTION |                | 1,635,420 7                                 | 1,635,420<br>0          |  | 0<br>0                            |
| CAPITAL PROJECTS 1995                   |                |   |                         |  | 0                                 |
| CASH WORKING CAPITAL (A-3)              | 248,158        | 0   | 247,275                 |  | 247,275                           |
| TOTAL RATE BASE                         | \$10,330,648   | \$1,069,265                                 | \$10,847,532            |  | \$12,482,952                      |
| RETURN ON RATE BASE                     | -0.05%         |   | -2.49%                  |  | 1.36%                             |
| OPERATING MARGIN                        | -0.17%         |   | -10.18%                 |  | 5.43%                             |

**EXHIBIT D - PRO FORMA INCOME  
STATEMENT USING PRESENT &  
PROPOSED RATES**

**KIAWAH ISLAND UTILITY, INC.**  
**STATISTICAL ANALYSIS FOR RATE CASE OPERATIONS**  
**TEST YEAR ENDED 12/31/95**

|                                    |        |
|------------------------------------|--------|
| <u>RATE OF RETURN ON RATE BASE</u> |        |
| PER BOOKS                          | -0.05% |
| AFTER PRO-FORMA ADJUSTMENTS        | -2.49% |
| AFTER RATE INCREASE                | 1.36%  |

|                              |         |
|------------------------------|---------|
| <u>OPERATING MARGIN</u>      |         |
| BEFORE PRO-FORMA ADJUSTMENTS | -0.17%  |
| AFTER PRO-FORMA ADJUSTMENTS  | -10.18% |
| AFTER RATE INCREASE          | 5.43%   |

**EXHIBIT D-1**  
**RATE ANALYSIS**

**CLARKSON'S HEARING EXHIBIT #1**

## ACCOUNTING PRO-FORMA ADJUSTMENTS SCHEDULE (A-1)

| Description of Entry   | 1<br>Operating<br>Revenues | 2<br>Operating<br>& Maintena | 3<br>Depreciatio<br>& Amortization | 4<br>Other | 5<br>Gross Plant Accumulate | 6<br>Depreciatio | 7<br>Contributions<br>In Aid of Const | 8<br>Rate<br>Increase | 9<br>Operating<br>Taxes | 10<br>Customer<br>Growth |
|--|----------------------------|------------------------------|------------------------------------|------------|-----------------------------|------------------|---------------------------------------|-----------------------|-------------------------|--------------------------|
| Move Tap-In revenue to Contributions in aid of construction  | (122,500)                  |                              |                                    |            |                             |                  | 122,500                               |                       |                         |                          |
| Eliminate Interest & Misc. Income. These types of revenue are not considered for rate making purposes. | (43,128)                   |                              |                                    |            |                             |                  |                                       |                       |                         |                          |
| Benefits not allowed for ratemaking purposes   |                            | (1,875)                      |                                    |            |                             |                  |                                       |                       |                         |                          |
| Eliminate Contributions In Aid of Construction associated with availability fees                       |                            |                              | (33,284)                           |            |                             |                  |                                       |                       |                         |                          |
| Capitalize tap fees which were expensed during 1995 and related depreciation                           |                            | (19,226)                     | 961                                |            | 19,226                      | 961              |                                       |                       |                         |                          |
| Remove cost of Ocean Course extension  |                            |                              |                                    |            |                             | 0                |                                       |                       |                         |                          |
| Work portion of Ocean Course   |                            |                              |                                    |            |                             | 0                |                                       |                       |                         |                          |
| Availability fees as a carry forward from previous rate case   |                            |                              |                                    |            |                             |                  | 1,512,920                             |                       |                         |                          |
| Capital additions under contract and related depreciation  |                            |                              |                                    |            | 2,755,303                   | 68,883           |                                       |                       |                         |                          |
| Bridge removal   |                            |                              |                                    | 50,000     |                             |                  |                                       |                       |                         |                          |
| Reduce professional fees to \$54,454 (the three year average of professional fees)                     |                            | (46,790)                     |                                    |            |                             |                  |                                       |                       |                         |                          |
| Estimate of Professional fees Amortized Cost over 3 years for rate case based upon previous figures    |                            | 10,826                       |                                    |            |                             |                  |                                       |                       |                         |                          |
| Customer Growth with Increase  |                            |                              |                                    |            |                             |                  |                                       |                       |                         | 2,998                    |
| Effect of Interest synchronization   |                            |                              |                                    |            |                             |                  |                                       |                       | 47,265                  |                          |
| Rate Increase from Rate Structure worksheets   |                            |                              |                                    |            |                             |                  |                                       | 484,369               |                         |                          |
|  |                            |                              |                                    |            |                             |                  |                                       |                       |                         |                          |
|  | (165,628)                  | (57,065)                     | (32,323)                           | 50,000     | 2,774,529                   | 69,844           | 1,635,420                             | 484,369               | 47,265                  | 2,998                    |

**EXHIBIT D -SCHEDULE 1**

CLARKSON'S HEARING EXHIBIT #1

KIAWAH ISLAND UTILITY, INC.  
CUSTOMER GROWTH SCHEDULE (A-2)  
TEST YEAR ENDED 12/31/95

|                  | GROWTH<br>FACTOR | NET<br>OPERATING INCOME | CUSTOMER<br>GROWTH |
|------------------|------------------|-------------------------|--------------------|
| PER BOOKS        | 1.8%             | (\$4,702)               | (\$83)             |
| AS ADJUSTED BOOK | 1.8%             | (269,955)               | (\$4,757)          |
| AFTER INCREASE   | 1.8%             | 170,147                 | \$2,998            |

|                    | Total<br>Water & Sewer | Sewer | Water |
|--------------------|------------------------|-------|-------|
| CUSTOMERS 1/1/95   | 4906                   | 2305  | 2601  |
| CUSTOMERS 12/31/95 | 5082                   | 2386  | 2696  |
| AVERAGE CUSTOMER   | 4994                   |       |       |
| GROWTH FACTOR      | 1.8%                   |       |       |

$$\text{GROWTH FACTOR} = \frac{\text{END OF YEAR CUSTOMERS} - \text{AVERAGE CUSTOMERS}}{\text{AVERAGE CUSTOMERS}}$$

**EXHIBIT D - SCHEDULE 2**

KIAWAH ISLAND UTILITY, INC.  
CASH WORKING CAPITAL SCHEDULE (A-3)  
TEST YEAR ENDED 12/31/95

| <u>DESCRIPTION</u>           | <u>PER BOOKS</u> | <u>AS<br/>ADJUSTED</u> |
|------------------------------|------------------|------------------------|
| O & M EXPENSE                | \$1,782,743      | 1,725,678              |
| OTHER                        | 202,519          | 252,519                |
| TOTAL                        | 1,985,262        | 1,978,197              |
| WORKING CAP<br>RATE @45 DAYS | 12.5%            | 12.5%                  |
| CASH WORKING<br>CAPITAL      | \$248,158        | \$247,275              |

**EXHIBIT D - SCHEDULE 3**

CLARKSON'S HEARING EXHIBIT #1

KIAWAH ISLAND UTILITY, INC.  
DEBT/EQUITY STRUCTURE SCHEDULE (A-4)  
TEST YEAR ENDED 12/31/95

BEFORE ADJUSTMENTS  
PRORATED

| DESCRIPTION   | CAPITAL<br>STRUCTURE | RATIO | RATE<br>BASE        | EMBEDDED<br>COST/RETURN | OVERALL<br>COST<br>/RETURN | INCOME FOR<br>RETURN |
|---------------|----------------------|-------|---------------------|-------------------------|----------------------------|----------------------|
| LONG-TERM DEB | \$5,249,304          | 49%   | \$5,035,311         | 8.22%                   | 4.01%                      | \$413,828            |
| COMMON EQUITY | 5,520,380            | 51%   | 5,295,337           | -7.90%                  | -4.05%                     | (418,530)            |
|               | <u>\$10,769,684</u>  | 100%  | <u>\$10,330,648</u> |                         | -0.05%                     | (4,702)              |

AFTER ADJUSTMENTS

|               |                     |      |                     |         |        |           |
|---------------|---------------------|------|---------------------|---------|--------|-----------|
| LONG-TERM DEB | \$8,004,455         | 59%  | \$6,419,936         | 8.22%   | 4.86%  | \$527,623 |
| COMMON EQUITY | 5,520,380           | 41%  | 4,427,595           | -18.01% | -7.35% | (797,579) |
|               | <u>\$13,524,835</u> | 100% | <u>\$10,847,532</u> |         | -2.49% | (269,955) |

DEBT STRUCTURE DETAIL

|                    |       |                                      |
|--------------------|-------|--------------------------------------|
| \$2,762,281        | 8.06% | \$222,640                            |
| 1,380,000          | 8.31% | 114,678                              |
| 1,107,023          | 8.50% | 94,097                               |
| <u>\$5,249,304</u> |       | <u>\$431,415</u> ANNUALIZED INTEREST |

8.22% WEIGHTED AVERAGE INTEREST

KIU PROJECTED DEBT STRUCTURE FOR DEC 31, 1996

DEBT STRUCTURE DETAIL AFTER ADDITIONS

|                    |       |                                      |
|--------------------|-------|--------------------------------------|
| \$2,762,281        | 8.06% | \$222,640                            |
| 2,380,000          | 7.58% | 180,404                              |
| <u>2,862,174</u>   | 8.25% | <u>236,129</u>                       |
| <u>\$8,004,455</u> |       | <u>\$639,173</u> ANNUALIZED INTEREST |

7.99% WEIGHTED AVERAGE INTEREST

TAX EFFECT OF INTEREST SYNCHRONIZATION

|                          |                |
|--------------------------|----------------|
| INPUTED INTEREST         | 527,623        |
| PER BOOK INTEREST        | <u>388,610</u> |
| DIFFERENCE               | 139,013        |
| TAX RATE                 | 34%            |
| TAX EFFECT ON INT. SYNCH | 47,265         |

## EXHIBIT D - SCHEDULE 4

KAIAWAH ISLAND UTILITY, INC.  
Utility Usage Analysis(A-5)  
As of December 31,1995

|                    | Commercial |         | Irrigation |         | Hotel   |         | Residential |         | Golf Mix   |         | Totals     |         |
|--------------------|------------|---------|------------|---------|---------|---------|-------------|---------|------------|---------|------------|---------|
|                    | # Customer | Gallons | # Customer | Gallons | # Rooms | Gallons | # Customer  | Gallons | # Customer | Gallons | # Customer | Gallons |
| Jan                | 69         | 1,217   | 138        | 2,376   | 150     | 427     | 2,427       | 15,332  | 4          | 8647    | 2788       | 27,999  |
| Feb                | 66         | 1,264   | 118        | 1,727   | 150     | 406     | 2,361       | 11,433  | 4          | 10148   | 2699       | 24,978  |
| Mar                | 67         | 1,306   | 118        | 2,357   | 150     | 444     | 2,370       | 12,529  | 4          | 19742   | 2709       | 36,378  |
| Apr                | 68         | 1,890   | 118        | 8,427   | 150     | 536     | 2,381       | 23,147  | 5          | 38940   | 2722       | 72,940  |
| May                | 68         | 2,674   | 126        | 22,310  | 150     | 791     | 2,388       | 29,455  | 5          | 39605   | 2737       | 94,835  |
| Jun                | 72         | 5,960   | 130        | 21,292  | 150     | 1,147   | 2,391       | 38,121  | 5          | 33069   | 2748       | 99,589  |
| Jul                | 68         | 3,614   | 130        | 23,580  | 150     | 1,094   | 2,397       | 36,499  | 5          | 46644   | 2750       | 111,431 |
| Aug                | 68         | 3,693   | 132        | 15,957  | 150     | 1,156   | 2,403       | 39,613  | 5          | 43046   | 2758       | 103,465 |
| Sep                | 68         | 3,830   | 132        | 18,153  | 150     | 1,052   | 2,408       | 39,163  | 5          | 25838   | 2763       | 88,036  |
| Oct                | 69         | 2,357   | 133        | 9,541   | 150     | 683     | 2,409       | 25,523  | 5          | 21257   | 2766       | 59,361  |
| Nov                | 69         | 2,229   | 133        | 6,555   | 150     | 637     | 2,414       | 18,660  | 5          | 20385   | 2771       | 48,466  |
| Dec                | 69         | 1,479   | 134        | 3,782   | 150     | 483     | 2,422       | 16,673  | 4          | 7495    | 2779       | 29,912  |
| Average Use        | 68         | 2,626   | 129        | 11,338  | 150     | 738     | 2,398       | 25,512  | 5          | 26,235  | 2,749      | 66,449  |
| Usage Per Customer |            | 38      |            | 88      |         | 5       |             | 11      |            | 5,622   |            | 24      |

|                    |           |       |           |        |          |     |           |        |            |        |           |        |
|--------------------|-----------|-------|-----------|--------|----------|-----|-----------|--------|------------|--------|-----------|--------|
| 1995 Water Revenue | \$109,131 |       | \$379,926 |        | \$30,616 |     | \$936,042 |        | \$422,066  |        | 1877781   |        |
| 1995 Sewer Revenue | \$70,493  |       |           |        | \$31,386 |     | \$621,327 |        |            |        | 723206    |        |
| Monthly Revenue    | \$14,969  |       | \$31,661  |        | \$5,167  |     | \$129,781 |        | \$35,172   |        | \$216,749 |        |
| Avg Use            | 68        | 2,626 | 129       | 11,338 | 150      | 738 | 2,398     | 25,512 | 5          | 26,235 | 2,749     | 66,449 |
| Cost per Customer  | \$218.79  |       | \$246.39  |        | \$34.45  |     | \$54.13   |        | \$7,536.89 |        | \$78.84   |        |

| IRRENT RATES                  | Commercial |           | Irrigation |           | Hotel |          | Residential                       |             | Golf Mix |           | Total Revenue |
|-------------------------------|------------|-----------|------------|-----------|-------|----------|-----------------------------------|-------------|----------|-----------|---------------|
| Water                         |            |           |            |           |       |          |                                   |             |          |           |               |
| Basic charge                  |            | \$18.00   |            | \$18.00   |       | \$8.00   |                                   | \$18.00     |          |           |               |
| Consumption charge@           | 1.80       | 68.40     | 2.05       | 180.40    | 1.80  | 9.00     | 1.80                              | 14.40       | 1.34     | 7,533.10  |               |
| Total Water Charge            |            | 86.40     |            | 198.40    |       | 17.00    |                                   | 32.40       |          | 7,533.10  |               |
| Sewer                         |            |           |            |           |       |          |                                   |             |          |           |               |
| Basic Charge                  |            | 18.00     |            |           |       | 7.50     |                                   | 22.00       |          |           |               |
| Consumption charge@           | 1.80       | 68.40     | 2.05       |           | 1.80  | 9.00     |                                   | 0.00        |          |           |               |
| Total Sewer Charge            |            | 86.40     |            |           |       | 16.50    |                                   | 22.00       |          |           |               |
| Total Cost Per Customer       |            | 172.80    |            | 198.40    |       | 33.50    |                                   | 54.40       |          | 7,533.10  |               |
| Total Water Revenue/month     |            | 5,911     |            | 25,494    |       | 2,550    |                                   | 77,682      |          | 35,154    | 146,792       |
| Total Sewer Revenue Per Month |            | 5,911     |            | 0         |       | 2,475    |                                   | 52,747      |          | 0         | 61,133        |
|                               |            | \$11,822  |            | \$25,494  |       | \$5,025  |                                   | \$130,429   |          | \$35,154  | \$207,925     |
| Annual Revenue                |            | \$141,869 |            | \$305,933 |       | \$60,300 |                                   | \$1,565,142 |          | \$421,853 | \$2,495,097   |
| PROPOSED RATES                |            |           |            |           |       |          |                                   |             |          |           |               |
| Water                         |            |           |            |           |       |          |                                   |             |          |           |               |
| Basic charge                  |            | \$21.00   |            | \$21.00   |       | \$9.50   | See Residential Usage<br>analysis |             |          |           |               |
| Consumption charge@           | 2.10       | 80.70     | 2.40       | 211.76    | 2.10  | 10.33    |                                   |             | 1.57     | 8,826.09  |               |
| Total Water Charge            |            | 101.70    |            | 232.76    |       | 19.83    |                                   |             |          | 8,826.09  |               |
| Sewer                         |            |           |            |           |       |          |                                   |             |          |           |               |
| Basic Charge                  |            | 21.00     |            | 0.00      |       | 8.75     |                                   |             |          |           |               |
| Consumption charge@           | 2.10       | 80.70     |            | 0.00      | 2.10  | 10.34    |                                   |             |          |           |               |
| Total Sewer Charge            |            | 101.70    |            | 0.00      |       | 19.09    |                                   |             |          |           |               |
| Total Cost Per Customer       |            | 203.40    |            | 232.76    |       | 38.93    |                                   |             |          | 8,826.09  |               |
| Total Water Revenue/month     |            | 6,958     |            | 29,910    |       | 2,975    |                                   |             |          | 41,188    | 81,031        |
| Total Sewer Revenue/month     |            | 6,958     |            | 0         |       | 2,864    |                                   |             |          | 0         | 9,822         |
| Total Water & Sewer Rev       |            | \$13,916  |            | \$29,910  |       | \$5,839  |                                   | \$157,436   |          | \$41,188  | \$248,289     |
| Annual Revenue                |            | \$166,988 |            | \$358,919 |       | \$70,066 |                                   | \$1,889,232 |          | \$494,261 | \$2,979,466   |
| Total Revenue Increase        |            |           |            |           |       |          |                                   |             |          |           | \$484,369     |

## EXHIBIT D - SCHEDULE 5

CLARKSON'S HEARING EXHIBIT #1



KIAWAH ISLAND UTILITY USAGE ANALYSIS (A-6)

1993

RESIDENTIAL CURRENT PROPOSED  
WATER- \$18.00 \$31.00 HFC  
SEWER- \$22.00 \$26.00 FLAT RATE CHARGE

CURRENT PROPOSED  
\$1.40 3 \$ 2  
12.10 /1000 GALS CONSUMPTION CHARGE  
2 Thousand Gallons Allowed Before Consumption Charge

| USAGE         | JAN | FEB | MAR | APR | MAY | JUN   | JUL   | AUG   | SEP | OCT | NOV | DEC | TOTAL | AVG | CURRENT<br>RATE | PROPOSED<br>RATE | %<br>INCREASE | NO. REV<br>TOTAL | NO. REV<br>WATER | NO. REV<br>SEWER |
|---------------|-----|-----|-----|-----|-----|-------|-------|-------|-----|-----|-----|-----|-------|-----|-----------------|------------------|---------------|------------------|------------------|------------------|
| 0 Cur<br>Gal  | 690 | 768 | 491 | 190 | 189 | 133   | 116   | 121   | 118 | 375 | 455 | 431 | 4,077 | 340 | \$40.00         | \$47.00          | 17.50%        | \$15,980.00      | \$7,140.00       | \$8,840.00       |
| 1 Cur<br>Gal  | 395 | 418 | 443 | 248 | 174 | 118   | 68    | 86    | 116 | 348 | 416 | 453 | 3,283 | 274 | 40.00           | 47.00            | 17.50%        | 12,478.00        | 5,724.00         | 7,124.00         |
| 2 Cur<br>Gal  | 300 | 197 | 301 | 273 | 233 | 167   | 134   | 81    | 119 | 294 | 332 | 332 | 2,763 | 230 | 40.00           | 47.00            | 17.50%        | 10,810.00        | 4,830.00         | 5,980.00         |
| 3 Cur<br>Gal  | 199 | 166 | 217 | 253 | 273 | 192   | 158   | 125   | 169 | 256 | 229 | 228 | 2,465 | 205 | 40.00           | 49.10            | 22.75%        | 10,065.50        | 4,725.50         | 5,330.00         |
| 4 Cur<br>Gal  | 161 | 133 | 204 | 239 | 225 | 190   | 164   | 138   | 187 | 184 | 139 | 164 | 2,148 | 179 | 41.80           | 51.20            | 22.49%        | 9,164.80         | 4,510.80         | 4,654.00         |
| 5 Cur<br>Gal  | 113 | 120 | 114 | 166 | 199 | 178   | 142   | 140   | 159 | 123 | 87  | 113 | 1,656 | 138 | 43.60           | 53.30            | 22.25%        | 7,355.40         | 3,767.40         | 3,588.00         |
| 6 Cur<br>Gal  | 565 | 600 | 570 | 830 | 995 | 890   | 710   | 795   | 507 | 615 | 435 | 575 | 8,280 | 5   | 43.60           | 53.30            | 22.25%        | 7,355.40         | 3,767.40         | 3,588.00         |
| 7 Cur<br>Gal  | 85  | 93  | 94  | 127 | 139 | 168   | 152   | 136   | 141 | 96  | 81  | 72  | 1,404 | 117 | 45.40           | 55.40            | 22.03%        | 6,481.80         | 3,439.80         | 3,042.00         |
| 8 Cur<br>Gal  | 510 | 538 | 564 | 762 | 834 | 1,008 | 912   | 936   | 846 | 376 | 486 | 432 | 8,424 | 6   | 45.40           | 55.40            | 22.03%        | 6,481.80         | 3,439.80         | 3,042.00         |
| 9 Cur<br>Gal  | 78  | 78  | 75  | 93  | 93  | 117   | 144   | 131   | 137 | 71  | 65  | 57  | 1,139 | 97  | 47.20           | 57.50            | 21.82%        | 5,577.50         | 3,055.50         | 2,522.00         |
| 10 Cur<br>Gal | 42  | 50  | 52  | 80  | 70  | 108   | 144   | 139   | 106 | 50  | 46  | 47  | 934   | 78  | 49.00           | 59.60            | 21.63%        | 4,648.80         | 2,620.80         | 2,028.00         |
| 11 Cur<br>Gal | 336 | 400 | 416 | 640 | 560 | 864   | 1,132 | 1,112 | 848 | 400 | 368 | 376 | 7,472 | 8   | 49.00           | 59.60            | 21.63%        | 4,648.80         | 2,620.80         | 2,028.00         |
| 12 Cur<br>Gal | 39  | 49  | 50  | 54  | 55  | 77    | 128   | 153   | 87  | 38  | 44  | 47  | 821   | 68  | 50.80           | 61.70            | 21.46%        | 4,193.60         | 2,427.60         | 1,766.00         |
| 13 Cur<br>Gal | 320 | 270 | 360 | 580 | 340 | 720   | 1,030 | 1,080 | 810 | 300 | 250 | 340 | 6,410 | 53  | 52.60           | 63.80            | 21.29%        | 3,381.40         | 2,003.40         | 1,378.00         |
| 14 Cur<br>Gal | 16  | 26  | 32  | 38  | 29  | 62    | 89    | 88    | 73  | 22  | 33  | 29  | 537   | 45  | 54.40           | 65.90            | 21.14%        | 2,965.50         | 1,795.50         | 1,170.00         |
| 15 Cur<br>Gal | 176 | 286 | 352 | 418 | 319 | 682   | 979   | 968   | 803 | 242 | 363 | 319 | 5,907 | 11  | 54.40           | 65.90            | 21.14%        | 2,965.50         | 1,795.50         | 1,170.00         |
| 16 Cur<br>Gal | 20  | 35  | 27  | 31  | 26  | 39    | 57    | 86    | 52  | 26  | 23  | 33  | 445   | 37  | 56.20           | 68.00            | 21.00%        | 2,516.00         | 1,554.00         | 962.00           |
| 17 Cur<br>Gal | 240 | 300 | 324 | 372 | 312 | 468   | 684   | 1,032 | 624 | 312 | 276 | 396 | 5,340 | 12  | 56.20           | 68.00            | 21.00%        | 2,516.00         | 1,554.00         | 962.00           |
| 18 Cur<br>Gal | 16  | 18  | 26  | 27  | 28  | 33    | 60    | 45    | 45  | 30  | 19  | 33  | 380   | 32  | 58.00           | 70.10            | 20.86%        | 2,243.20         | 1,411.20         | 832.00           |
| 19 Cur<br>Gal | 208 | 234 | 338 | 351 | 364 | 429   | 780   | 585   | 585 | 390 | 247 | 429 | 4,940 | 13  | 58.00           | 70.10            | 20.86%        | 2,243.20         | 1,411.20         | 832.00           |
| 20 Cur<br>Gal | 15  | 23  | 20  | 22  | 28  | 28    | 50    | 37    | 39  | 28  | 19  | 21  | 350   | 29  | 59.80           | 72.20            | 20.74%        | 2,093.80         | 1,339.80         | 754.00           |
| 21 Cur<br>Gal | 210 | 322 | 280 | 308 | 392 | 392   | 700   | 518   | 826 | 392 | 266 | 294 | 4,900 | 14  | 59.80           | 72.20            | 20.74%        | 2,093.80         | 1,339.80         | 754.00           |

# EXHIBIT D - SCHEDULE 6

CLARKSON'S HEARING EXHIBIT #1

# KIAVAH ISLAND UTILITY USAGE ANALYSIS (A-6)

1995

RESIDENTIAL - CURRENT PROPOSED  
WATER- 111.00 131.00 IFC  
SEWER- 122.00 126.00 FLAT RATE CHARGE

CURRENT PROPOSED  
11.10 13.10 /1000 GALS CONSUMPTION CHARGE  
2 Thousand Gallons Allowed Before Consumption Charge

| USAGE       | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    | OCT    | NOV    | DEC    | TOTAL   | AVG   | CURRENT<br>RATE | PROPOSED<br>RATE | %<br>INCREASE | MO. REV<br>TOTAL | NO. REV.<br>WATER | NO. REV.<br>SEWER |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|-----------------|------------------|---------------|------------------|-------------------|-------------------|
| 15 Cus      | 12     | 10     | 16     | 28     | 22     | 23     | 26     | 44     | 30     | 28     | 33     | 30     | 302     | 25    | 61.60           | 74.30            | 20.62%        | 1,857.50         | 1,207.50          | 650.00            |
| 16-20 Cus   | 180    | 150    | 240    | 420    | 320    | 345    | 390    | 660    | 450    | 420    | 495    | 450    | 4,530   | 15    | 61.60           | 74.30            | 20.62%        | 1,857.50         | 1,207.50          | 650.00            |
| GAL         | 947    | 59     | 65     | 99     | 106    | 104    | 125    | 132    | 151    | 109    | 102    | 85     | 1,210   | 101   | 67.00           | 80.60            | 20.30%        | 8,140.00         | 5,314.60          | 2,825.00          |
| 21-25 Cus   | 25     | 27     | 34     | 89     | 102    | 96     | 119    | 110    | 111    | 79     | 71     | 54     | 907     | 76    | 76.00           | 91.10            | 19.87%        | 6,923.60         | 4,947.60          | 1,976.00          |
| GAL         | 563    | 613    | 540    | 2,046  | 2,329  | 2,212  | 2,713  | 2,518  | 2,328  | 1,807  | 1,637  | 1,219  | 20,735  | 23    | 76.00           | 91.10            | 19.87%        | 6,923.60         | 4,947.60          | 1,976.00          |
| 26-30 Cus   | 19     | 15     | 34     | 77     | 88     | 94     | 87     | 100    | 105    | 56     | 51     | 51     | 777     | 65    | 85.00           | 101.60           | 19.33%        | 6,604.00         | 4,914.00          | 1,690.00          |
| GAL         | 522    | 418    | 945    | 2,122  | 2,460  | 2,603  | 2,421  | 2,790  | 2,946  | 1,535  | 1,418  | 1,406  | 21,606  | 28    | 85.00           | 101.60           | 19.33%        | 6,604.00         | 4,914.00          | 1,690.00          |
| 31-35 Cus   | 15     | 15     | 12     | 43     | 67     | 71     | 76     | 72     | 64     | 41     | 38     | 26     | 540     | 45    | 94.00           | 112.10           | 19.26%        | 5,044.50         | 3,874.50          | 1,170.00          |
| GAL         | 493    | 494    | 397    | 1,420  | 2,199  | 2,328  | 2,508  | 2,397  | 2,110  | 1,338  | 1,256  | 832    | 17,792  | 33    | 94.00           | 112.10           | 19.26%        | 5,044.50         | 3,874.50          | 1,170.00          |
| 36-OVER CUS | 35     | 44     | 37     | 136    | 208    | 320    | 255    | 291    | 278    | 125    | 106    | 80     | 1,905   | 159   | 151.60          | 179.30           | 18.27%        | 28,508.70        | 24,374.70         | 4,134.00          |
| GAL         | 2,356  | 2,896  | 2,570  | 7,285  | 12,591 | 20,027 | 15,636 | 18,107 | 18,297 | 11,935 | 6,151  | 4,767  | 123,238 | 65    | 151.60          | 179.30           | 18.27%        | 28,508.70        | 24,374.70         | 4,134.00          |
| Total: Cus  | 2,360  | 2,361  | 2,370  | 2,381  | 2,388  | 2,391  | 2,397  | 2,403  | 2,408  | 2,409  | 2,414  | 2,422  | 28,704  | 2,392 |                 |                  |               | \$157,436.20     | \$95,218.20       | \$62,218.00       |
| GAL         | 10,759 | 11,433 | 12,529 | 23,147 | 29,435 | 38,121 | 36,499 | 39,613 | 39,163 | 25,523 | 18,660 | 16,673 | 301,575 | 11    |                 |                  |               |                  |                   |                   |

CLARKSON'S HEARING EXHIBIT #1

KIAWAH ISLAND UTILITY, INC.  
WATER AND SEWER RATE COMPARISON  
Based on an Average Use of 7,000 gal/month

| <u>UTILITY COMPANY</u>                 | <u>TOTAL MONTHLY CHARGE</u> |
|--|-----------------------------|
| Isle of Palms (includes Wild Dunes)    | \$72.00                     |
| Charleston CPW (outside City)          | \$68.07                     |
| Seabrook Island                        | \$65.38                     |
| City of Goose Creek (out of town)      | \$64.14                     |
| Carolina Water Company                 | \$59.68                     |
| Kiawah Island Utility (w/increase)     | \$57.50                     |
| James Island PSD                       | \$53.60                     |
| Kiawah Island Utility, Inc. (existing) | \$47.20                     |
| City of Goose Creek                    | \$45.07                     |

CLARKSON'S  
HEARING EXHIBIT #2

POSTED  
10/30/96

S.C. PUBLIC SERVICE COMMISSION  
RECEIVED  
OCT 30 1996

KIAWAH ISLAND UTILITY, INC.

DOCKET NO. 96-168-W/S

PRE-FILED TESTIMONY OF MITCHELL BOHANNON

BEFORE THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

Testimony Prepared: October 29, 1996

Hearing Date: December 2, 1996

THIS TESTIMONY IS FILED PURSUANT TO PSC ORDER DATED OCTOBER 17, 1996. THE APPLICANT RESERVES THE RIGHT TO PROVIDE REBUTTAL TESTIMONY TO THE TESTIMONY TO BE PRE-FILED, PURSUANT TO SAID ORDER, BY THE COMMISSION STAFF AND INTERVENORS.

BY MR. PADGETT: Mr. Bohannon, would you please state your full name, business address and occupation?

BY MR. BOHANNON: My name is James Mitchell Bohannon, III, and I am a registered Professional Engineer and a Partner in the engineering firm of Thomas & Hutton Engineering Company. I have a Bachelor of Engineering Technology Degree from Georgia Southern College and a Bachelor of Science in Civil Engineering from Clemson University. I have over 20 years experience in civil engineering. Our firm's address is 966 Houston Northcutt Boulevard, Mt. Pleasant, SC 29464, and 3 Oglethorpe Professional Boulevard, Savannah, Georgia 31406.

BY MR. PADGETT: How long have you been with Thomas & Hutton?

BY MR. BOHANNON: Twenty (20) years.

BY MR. PADGETT: Mr. Bohannon, could you briefly tell us a little about your firm, Thomas & Hutton Engineering Co.?

BY MR. BOHANNON: Yes, sir. Thomas & Hutton Engineering Co., was founded in 1947 by Mr. Hue Thomas and Mr. Joseph Hutton in Savannah, Georgia. The firm was incorporated in its present corporate structure in 1955. Throughout its history, Thomas & Hutton has served a broad range of clients, including municipalities, state and federal government agencies, industrial clients, major utilities and private landowners. Our work with private developments and developers has been quite extensive on the South Carolina coast. We have served as civil engineers for communities such as Sea Pines Plantation, Long Cove Club, Wexford Plantation, Hilton Head Plantation, Rose Hill Plantation, Moss Creek Plantation, Indigo Run, Dataw Island, Melrose Club, Bloody Pointe, and Haig Pointe, all in the Hilton Head area.

We have also worked for Sea Pines Public Service District, Forrest Beach Public Service District, Long Cove Utilities, Rose Hill Utilities, Hilton Head Plantation Utility Company and Beaufort-Jasper Water Authority in the Hilton Head area, many of which are regulated by this Public Service Commission. In the local Charleston area, our clients include Charleston National Country Club, Kiawah Island, Daniel Island, Isle of Palms Water & Sewer Commission, Mt. Pleasant Waterworks & Sewer Commission, and we are currently working for the Guggenheim Foundation in the master planning and pre-development studies for properties on the Cainhoy Peninsula. This experience has given us extensive knowledge of the needs of very large developments and the

associated utilities. We have worked extensively at Kiawah since the days when we were part of the Master Planning team at Kiawah in the early 1970s. We have designed practically all of the road and sewer facilities at Kiawah for almost two decades.

BY MR. PADGETT: Mr. Bohannon, have you been here in the hearing room to hear the testimony that has been presented today by Townsend Clarkson, Chief Financial Officer for Kiawah Island Utilities, Inc.?

BY MR. BOHANNON: Yes sir, I have.

BY MR. PADGETT: Has Thomas & Hutton performed engineering services specifically for Kiawah Island Utilities, Inc.?

BY MR. BOHANNON: Yes sir, we have. Commencing in 1974, Thomas & Hutton was retained by the Kuwaities to provide design services and construction administration for the utility projects that needed to be constructed on Kiawah Island.

When KRA purchased the land in 1988, it retained Thomas & Hutton to continue its design services and construction administration for the utility project in the Island.

With the exception of a few projects designed by CH<sub>2</sub>M Hill, Inc., in the early 1980s, Thomas & Hutton has worked continuously since 1974 in the design of most

of the infrastructure on the Island. Our services include design of all of the roads, bridges, drainage systems, dune walkovers, and cart bridges for the entire Island. This is very similar to the services we have provided in Sea Pines Plantation, Long Cove Club, Wexford Plantation, Hilton Head Plantation, Rose Hill, Dawtaw Island, Melrose Club, Haig Pointe and Bloody Pointe, as well as the Landings on Skidway Island, Georgia.

BY MR. PADGETT: Mr. Bohannon, would you please explain why upgrades to the wastewater treatment plant were conducted in the spring of 1995?

BY MR. BOHANNON: There had historically been a shortage of effluent storage at the KIU facility to meet the needs of the KIU customers for golf course irrigation water. The pending construction of the River Course Golf Course and the modification to the Marsh Point Golf Course made this need even more acute. Therefore, it was imperative that KIU undertake construction of the effluent storage facilities in order to be able to fully meet the needs of their customers.

BY MR. PADGETT: Mr. Bohannon, the Utility Company constructed a new 1.0 million gallon water storage tank and pumping station in the spring of 1996. Could you explain the reason for this storage tank and pumping facility?

BY MR. BOHANNON: In order to fully answer this question, one has to go back

to look at the predesigned report for water system improvements prepared by CH<sub>2</sub>M Hill, Inc., in 1984. This report discussed possible future improvements to the water system in order to provide for the anticipated growth of residential development over the next decade. This report discussed a storage facility on the east end of the island to supplement the production capabilities of the water pumping plant located on Sora Rail Road. Because of the large number of homes being built and dramatically increased irrigation usage, the facilities at the Sora Rail Road Facility very often were working close to full capacity. Coincident with these increased demands was a study prepared by the Kiawah Island Task Force, comprised of the St. John's Fire Department, the Town of Kiawah Island, and Kiawah Island Utility, Inc., which made recommendations for upgrades to the system that might increase the water available for fire protection on Kiawah Island. These increased fire demands, irrigation demands, and a large number of homes being built dictated that enhancements to the water system be undertaken in order to continue to maintain the high quality service level that has been historically provided by KIU. Thomas & Hutton prepared a study which made recommendations for the size of the storage and pumping facilities needed and subsequently designed the Down Island Water Storage and Pumping Facility which was constructed and completed in 1996.

BY MR. PADGETT:        Mr. Bohannon, it is my understanding that KIU is currently performing a sludge removal project at their wastewater treatment facility. Would you explain why this project is needed?



BY MR. BOHANNON: The wastewater treatment plant, as it currently exists, has been operating since the early 1980s. These long years of operation have generated a build-up of bio-solids or sludge in the cells over this long period of time. The drying beds and compost facility that KIU has in place was unable to keep up with the large quantity of solids being generated. This was causing suspended solids to be passed through the treatment plant. Therefore, in order to catch up with the solids removal, this project was undertaken to clean and remove the majority of the bio-solids from Treatment Cell No. 3. It is the intention of KIU that once the solids are removed from Treatment Cell No. 3, they will utilize their drying beds and compost facility to periodically remove sludge from Treatment Cell No. 3.

BY MR. PADGETT: Mr. Bohannon, I understand KIU has made some modifications on the Sora Rail Road Water Pumping Station. Could you explain what those are and why those were necessary?

BY MR. BOHANNON: Yes, sir. Again, a bit of history is good to understand the rationale and reasoning for these upgrades. In prior years, there were fairly dramatic swings in the diurnal demands or the daily fluctuations in the demand of the water system. There were periods of extremely low flow. These were handled in the past by some small pumps of 15-25 hp range. Operation of these pumps was able to keep up with the demand in the system. As the demand increased, pumps were added to meet the system demands as they increased. As the Island has grown, characteristics

of the diurnal fluctuation or the fluctuation between high and low flows has changed. Because of the higher flows, these smaller pumps were no longer able to be used effectively to supply water to the system. Rather than making wholesale modifications to the plant to add even more pumps to follow the changed demand, the decision was made to install variable speed pumps. This was a change from the existing constant speed pumps to variable speed. This would allow the pumps to respond to the variations in the demand from the system and meet the flow and pressure needs of the KIU customers. The decision to utilize variable speed pumps allows KIU to more effectively manage and operate the system than would have been realized by adding additional pumps of various horse power and sequencing these pumps to meet the demands of the system.

BY MR. PADGETT: Mr. Bohannon, did Thomas & Hutton prepare a study of the transmission lines and related appurtenances purchased by the Utility Company from KRA?

BY MR. BOHANNON: Yes, sir. We determined that KRA had constructed and paid for transmission lines and related appurtenances that had not been purchased by the Utility Company. The Utility Company purchased the transmission lines and appurtenances for the sum of \$805,795. All of the transmission lines and appurtenances that were purchased were specifically located and identified as to size and type of line or facility. All of these facilities were constructed since the last study

that we conducted for the rate case in 1992.

This concludes my direct testimony.